

SEQUENCE LISTING

<110> Conklin, Darrell C.

<120> KUNITZ DOMAIN POLYPEPTIDE ZKUN6

<130> 98-40

<160> 7

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 177

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)...(177)

<400> 1

ggc	ccc	ggc	gac	gcc	tgc	gtg	ctg	cct	gcc	gtg	cag	ggc	ccc	tgc	cgg	48
Gly	Pro	Gly	Asp	Ala	Cys	Val	Leu	Pro	Ala	Val	Gln	Gly	Pro	Cys	Arg	
1				5					10					15		

ggc	tgg	gag	ccg	cgc	tgg	gcc	tac	agc	ccg	ctg	ctg	cag	cag	tgc	cat	96
Gly	Trp	Glu	Pro	Arg	Trp	Ala	Tyr	Ser	Pro	Leu	Leu	Gln	Gln	Cys	His	
			20					25						30		

ccc	ttc	gtg	tac	ggt	ggc	tgc	gag	ggc	aac	ggc	aac	aac	ttc	cac	agc	144
Pro	Phe	Val	Tyr	Gly	Gly	Cys	Glu	Gly	Asn	Gly	Asn	Asn	Phe	His	Ser	
		35					40						45			

cgc	gag	agc	tgc	gag	gat	gcc	tgc	ccc	gtg	ccg						177
Arg	Glu	Ser	Cys	Glu	Asp	Ala	Cys	Pro	Val	Pro						
		50				55										

<210> 2

<211> 59

<212> PRT

<400> 2

Gly Pro Gly Asp Ala Cys Val Leu Pro Ala Val Gln Gly Pro Cys Arg
1 5 10 15
Gly Trp Glu Pro Arg Trp Ala Tyr Ser Pro Leu Leu Gln Gln Cys His
20 25 30
Pro Phe Val Tyr Gly Gly Cys Glu Gly Asn Gly Asn Asn Phe His Ser
35 40 45
Arg Glu Ser Cys Glu Asp Ala Cys Pro Val Pro
50 55

<211> 51

<213> Artificial Sequence

<223> Kunitz motif

 $\langle 222 \rangle \quad (2) \dots (2)$

<223> Xaa is any residue except Asp, Cys, Gly, His, Met,
Pro or Trp

 $\langle 222 \rangle \quad (3) \dots (3)$

<223> Xaa is Leu, Glu, Met, Gln, Phe, Ser, Thr, Ala or Pro

 $\langle 222 \rangle$ (4) ... (4)

<223> Xaa is any residue except Arg, Cys, Met, Phe, Trp,
Tyr or Val

$\langle 222 \rangle$ (5), ..., (5)

<223> Xaa is any residue except Asn, Cys, Gln, Gly, Phe, Ser, Thr or Trp

 $\langle 222 \rangle$ (6)...(6)

<223> Xaa is Arg, Glu, Asn, Ala, Val, Asp, Lys, Ser, Tyr

or Met

<221> VARIANT
 <222> (7)...(7)
 <223> Xaa is any residue except Asn, Cys, Gly, His, Leu,
 Met, Phe or Trp

<221> VARIANT
 <222> (8)...(8)
 <223> Xaa is Gly or Glu

<221> VARIANT
 <222> (9)...(9)
 <223> Xaa is Pro, Arg, Leu, Val, Ser, Asp, Ile, Asn or
 Thr

<221> VARIANT
 <222> (11)...(11)
 <223> Xaa is any residue except Ala, Cys, Glu, His, Ile,
 Pro, Trp or Val

<221> VARIANT
 <222> (12)...(12)
 <223> Xaa is Arg, Lys, Ala, Asp, Gln, Phe, Gly, Glu, Thr
 or Ser

<221> VARIANT
 <222> (13)...(13)
 <223> Xaa is any residue except Asp, Cys, Glu, Pro or Thr
 <221> VARIANT
 <222> (14)...(14)
 <223> Xaa is any residue except Arg, Asn, Cys, Gly, His, Ser, Trp or

Tyr

<221> VARIANT
 <222> (15)...(15)
 <223> Xaa is any residue except Ala, Asp, Cys, Gly, His, Met, Trp or

Tyr

<221> VARIANT
 <222> (16)...(16)
 <223> Xaa is Ser, Ala, Arg, Val, Gln, Lys, Leu, Gly or Ile

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<221> VARIANT
 <222> (17)...(17)
 <223> Xaa is Phe, Tyr, Ile, Trp or Leu

<221> VARIANT
 <222> (18)...(18)
 <223> Xaa is Tyr, His, Phe, Trp, Asn or Ala

<221> VARIANT
 <222> (19)...(19)
 <223> Xaa is Tyr or Phe

<221> VARIANT
 <222> (20)...(20)
 <223> Xaa is Lys, Asn, Ser or Asp

<221> VARIANT
 <222> (21)...(21)
 <223> Xaa is any residue except Asp, Cys, Glu, His or Tyr

<221> VARIANT
 <222> (22)...(22)
 <223> Xaa is any residue except Cys, Met, Pro or Trp

<221> VARIANT
 <222> (23)...(23)
 <223> Xaa is Ala, Lys, Ser, Leu, Thr, Ile, Gln, Glu, Tyr or Val

<221> VARIANT
 <222> (24)...(24)
 <223> Xaa is Lys, Gln, Asn, His, Gly, Arg or Met

<221> VARIANT
 <222> (25)...(25)
 <223> Xaa is any residue except Asn, Asp, Cys, His, Ile, Pro, Trp,
 Tyr or Val

<221> VARIANT
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 <223> Xaa is any residue except Cys, Gly, Phe, Pro, Ser or Trp

<221> VARIANT
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<223> Xaa is any residue except Asp, Cys, His, Ile, Phe, Trp or Tyr

<221> VARIANT

<222> (29)...(29)

<223> Xaa is Phe or Tyr

<221> VARIANT

<222> (30)...(30)

<223> Xaa is any residue except Arg, Cys, Gly or Met

<221> VARIANT

<222> (31)...(31)

<223> Xaa is Tyr, Trp, Phe or Asp

<221> VARIANT

<222> (32)...(32)

<223> Xaa is Ser, Gly or Thr

<221> VARIANT

<222> (33)...(33)

<223> Xaa is Gly or Ile

<221> VARIANT

<222> (35)...(35)

<223> Xaa is Gly, Lys, Arg, Pro, Gln, Leu, Glu, Asn or Met

<221> VARIANT

<222> (36)...(36)

<223> Xaa is Gly, Lys or Ala

<221> VARIANT

<222> (37)...(37)

<223> Xaa is Asn, Lys or Ser

<221> VARIANT

<222> (38)...(38)

<223> Xaa is any residue except Cys, His, Ile, Phe, Pro, Thr, Trp,
Tyr or Val

<221> VARIANT

<222> (39)...(39)

<223> Xaa is Asn or Tyr

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<221> VARIANT
 <222> (40)...(40)
 <223> Xaa is Arg, Asn, Lys, Gln or Val

<221> VARIANT
 <222> (41)...(41)
 <223> Xaa is Phe, Tyr or Asp

<221> VARIANT
 <222> (42)...(42)
 <223> Xaa is any residue except Cys, Gln, Gly, Phe or Trp

<221> VARIANT
 <222> (43)...(43)
 <223> Xaa is Thr, Ser, Arg, Lys or Asp

<221> VARIANT
 <222> (44)...(44)
 <223> Xaa is Ile, Leu, Trp, Arg, Lys, Thr, Glu, Ala, Gln or Val

<221> VARIANT
 <222> (45)...(45)
 <223> Xaa is Glu, Asp, Ala, His, Met, Val, Gln, Lys, Arg or Pro

<221> VARIANT
 <222> (46)...(46)
 <223> Xaa is Glu, Lys, Gln, Asp, Ala, Tyr or Ser

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 <223> Xaa is any residue except Ala, Cys, Gly, Phe, Pro, Ser, Thr,
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 Tyr or Val

<221> VARIANT
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<400> 3

Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa
 35 40 45
 Xaa Xaa Cys
 50

<210> 4
 <211> 177
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Degenerate Sequence

<221> variation
 <222> (1)...(177)
 <223> n is any nucleotide

<400> 4
 ggncncngng aygcntgygt nytnccngcn gtncarggnc cntgymngng ntgggarccn 60
 mgntgggcnt aywsnccnyt nytnccarcar tgycayccnt tygtntaygg nggntgygar 120
 ggnaayggna ayaayttyca ywsnmngar wsntgygarg aygcntgycc ngtnccn 177

<210> 5
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 5
 Thr Asp Ile Cys Lys Leu Pro Lys Asp Glu Gly Thr Cys Arg Asp Phe
 1 5 10 15
 Ile Leu Lys Trp Tyr Tyr Asp Pro Asn Thr Lys Ser Cys Ala Arg Phe
 20 25 30
 Trp Tyr Gly Gly Cys Gly Gly Asn Glu Asn Lys Phe Gly Ser Gln Lys
 35 40 45
 Glu Cys Glu Lys Val Cys Ala
 50 55

<210> 6
 <211> 6

<212> PRT

<213> Artificial Sequence

$\langle 220 \rangle$

<223> Glu-Glu tag

<400> 6

Glu Tyr Met Pro Met Glu

1

5

 $\langle 210 \rangle$ 7

$\langle 211 \rangle$ 4

<212> PRT

<213> Artificial Sequence

<223> Thrombin cleavage site

<400> 7

Leu Val Pro Arg

1